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Abstract

The institute is designed to study and make recommendations for guidelines relating to the recruitment, selection, and training of teachers of trade and industrial education. The major objectives of the institute are to: (1) analyze existing programs to determine desirable qualities of trade and industrial teachers, (2) explore new sources for recruitment, (3) develop a recruiting guide, (4) explore the technique used in selection, (5) develop a guide for selection, (6) examine various plans presently being used for preparation and up-grading of teachers, and (7) develop guidelines for the preparation of teachers. Methods used to approach the topics of recruitment, selection, and training were through papers presented by consultants, small group discussion and field trips. Appended are sample invitations, a listing of participants, a schedule of activities, discussion forms, and evaluation instruments. (GR)

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FINAL REPORT

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INSTITUTE ON THE RECRUITMENT SELECTION AND TRAINING OF TEACHERS OF TRADE AND INDUSTRIAL EDUCATION

June 1969

U. S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE

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Lexington, Kentucky

June 1969

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Though an evening excursion to Berea College was not a part of the official proceedings of the institute, we would be remiss if gratitude were not expressed to Kenneth Herman Thompson, Dean of the College, for his most excellent presentation to the participants.

The Research Coordinating Unit at the University of Kentucky also merits a very special thanks for making available one of its personnel for rendering assistance in providing evaluation instruments and collecting data as well as giving advice and council in bringing the project to fruition.

SUMMARY

Fifty four persons from twenty-eight different states met at the University of Kentucky. Lexington, Kentucky in June 1968, in an institute designed to study and make recommendations for guidelines relating to the recruitment, selection, and training of teachers of trade and industrial education. The institute was an activity sponsored by the Department of Vocational Education, College of Education, and was under the guidance of Dr. L. C. McDowell, Mr. B. T. Fagan, and Mr. E. P. Hilton.

One of the inherent purposes of the institute was to assess conditions existing throughout the nation as regards attainment of sufficient numbers of teachers of trade and industrial education to fill existing and forthcoming positions for rapidly expanding facilities. More specifically, the institute had as its major objectives, the following:

1. To analyze secondary and post-secondary trade and industrial education programs as a means of determining desirable qualities of teachers

2. To explore new sources for recruitment of T & I teachers

3. To develop a recruiting guide (plan of action for persons responsible for obtaining T & I teacher candidates)

4. To explore the techniques used in selecting T & I teachers

5. To develop an effective guide for selecting T & I teachers

6. To examine various plans presently being used to prepare and up-grade teachers of trade and industrial education

7. To develop guidelines for the effective preparation of T & I teachers

The time allotted for the institute was divided into three parts for the three different aspects of the problem indicated in the title: recruitment, selection and training. Methods used in approaching these topics were through papers presented by consultants, small group discussion and field trips.

Results obtained from the methods appeared to differ according to nature of the objective. For example, it is felt that objectives 1, 2, 4, and 6 were achieved to a greater degree than objectives 3, 5, and 7. It is possible that the discussions which resulted in achievement of these objectives was due to the wide geographical spread of the states from which the participants came and the rich experience in vocational education which they brought with them.

Consultants used in the institute represented persons from private industry with expertise in recruitment and selection processes, and educators from state departments of education, as well as institutions of higher learning and the U.S. Office of Education, who have recognized competencies in recruitment, selection and training of vocational teachers. Copies of papers presented by these consultants would indicate that they would, collectively, be one of the high points of the institute.

Field trips were arranged so that the participants could visit the Kentucky State Department of Education, and a nearby regional university that had recently instituted a new curriculum for preparing trade and industrial education teachers. The State Department of Education visit allowed dialogue between participants and personnel in the Bureau of Vocational Education regarding mushrooming needs and problems in attaining teachers of trade and industrial education, while the visit to the regional university permitted an explanation of a new teacher preparation curriculum and an inspection of facilities.

It is recommended that additional study be given to a more formal setting down of guidelines or directions that local and state personnel may follow in helping them in recruitment and selection of teachers of trade and industrial education. Even though this institute had such objectives and, to a degree, attained them, it is felt that their fullest achievement was not possible due to lack of sufficient time. It is believed that, because of the rather widely held opinions of vocational educators in the various states, a definite pattern for training these teachers may be only a dream. However, general guidelines are possible, and were so indicated in the discussion groups.

INTRODUCTION

The problem situation--Though many problems exist in the realm of vocational education the one on which the ultimate success of the whole enterprise rests is whether students receive effective teaching. Administrative policy, plans for supervision and activity in research, etc., must result in something happening in the classroom or the American tax payer has wasted a mountain of money, and millions of students have thrown away numberless hours of work and study. So important is the teaching activity that the solution of problems relating to the acquiring of competent teachers must be in the vanguard if vocational education is to survive.

The acquiring of competent teachers of trade and industrial education divides itself into three categories: recruitment, selection and training. To some degree these problems are of concern to all services of vocational education. However, the severity exists to a different degree among the services. Probably many reasons may be given as to why teachers of trade and industrial education are in such short supply--increased industrialization; increased recognition of the value of trade training by the public, in general; increased funds for vocational education, or whatever--the supply is far short of the demand. It appears that this demand will be continual because of the dynamic nature of trade and industrial education. This is succinctly pointed up in the General Report of the Advisory Council on Vocational Education, 1968 which states:

> Trade and industrial education is not static. Since it consists of programs that are constantly changing, trade and industrial teachers must be recruited from industry when programs are initiated, and cannot be stockpiled, as is the case in static school programs.
>
> Trade and industrial teacher education programs must be designed to change with the environment of the schools. Therefore, a dynamic program of industrial education must have a dynamic teacher education program.[1]

Trade and industrial education, as is the case with most ongoing organizations is continually seeking sources of recruitment for its personnel. It vies with industry as it attempts to search for competent and potentially competent teachers. The candidates it seeks are the same as those sought by industrial organizations for positions of leadership in the various crafts which make up the industrial complex.

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[1]U.S. Department of Health, Education and Welfare, General Report of the National Advisory Council on Vocational Education. Vocational Education, The Bridge Between Man and His Work. OE80052, November 1968, pp. 88-89.

Though it recruits in the same population field it must do so with certain handicaps that in many instances compounds its recruitment problem--the inability to match the financial rewards offered by industry. While some intrinsic rewards are forthcoming only from working in the field of vocational education--rewards which cannot be offered by industry--they are sometimes not readily seen by those whom vocational educators should like to recruit.

Speeches made by industrial personnel indicated that persons in vocational education have much to learn about the fine points of recruiting. Though the activity is a costly one, its results appear to justify the expense.

The recruiting activity is only the beginning problem in attaining trade and industrial teachers. To separate the desirable from the undesirable is no easy task, especially when the subject is people. It is not the simple matter of using a "go, no-go" gauge as is the case with checking gadgets. Yet, selection must be done.

Selection is a negative process, whereas recruitment is a positive one. Attempts are made to eliminate those who, for some reason, don't fit the criteria or are unable to leap the hurdles which the job poses, or at least which the employer believes the job to pose. Possibly the selection process would not be so difficult if agreement could be gained as to what the criteria should be. Teachers, found acceptable in one state on the basis of particular criteria, would not be selected in a neighboring state, and in many instances would not be acceptable from city to city within the same state.

No vocational education administrator wants to hire his problems and the degree to which his selection process is effective to this degree will his teacher problems be fewer. One of the participants in the institute stated it this way, "Making a poor selection of teacher is worse than selecting a bad architect for your building, he's a lot harder to get rid of and his building won't stand."

Though practical work experience is recognized by all as a necessary criterion in selecting teachers in trade and industrial education there is no certainty that a particular number of years is better than another as a minimum amount to be considered; the extent of pre-service training if any, is as indecisive. Most states use no tests--technical information, performance, or psychological--that would be of aid in making proper selection of teachers of trade subjects. In considering these facts one cannot help but wonder why problems relating to effective selection of teaching personnel are not more extensive than they presently are.

Effective teachers of trade and industrial subjects are not only recruited and selected but prepared as well. Because such teachers, unlike most other teachers in vocational education, do not come already trained, their preparation during their teaching efforts is of special significance. Good teaching is a science as well as an art. That is, it is a science to the degree that recognized principles and concepts of social, behavioral, and physical sciences are used during the teaching

process, and unless the individual brings these knowledges with him they must be obtained on the job.

While it may be true that some instructors appear to do an effective job of teaching from their initial efforts by "doing what comes naturally" the far greater majority founder in a morass of pedagogical errors. Those of the former group improve very significantly after formal teacher training.

But to what extent should the trade teacher have this training for his new job (of teaching)? How much, if any, should he have before he begins his teaching? How much, if any, should he have after he begins his teaching? What form should the training take? To what extent should it be of classroom nature? Internship? Observation? A multitude of such questions come to mind when attempting to analyze the training needs of teachers. That amount of training which would be considered optimum may be that which is practical, and neither may coincide with what is minimum.

Again the problem is compounded by the views and philosophies taken by administrators and teacher educators in the various states. Because of this, there may be little reciprocity between states as regards training which trade teachers receive.

Some states are experimenting with various patterns of teacher preparation programs. Most all such patterns include certain amounts of practical experience with formal coordination with the teacher training institution, as well as internships, technical, professional, and general academic courses. Whether teachers produced in this manner will exceed, equal, or be inferior to those produced by other means can only be determined after a "tryout" period. If they are inferior, without doubt, the process will be altered or dropped; if they are equal or superior to the methods of attaining teachers which have been used for so many years, the older methods will become history.

The need, then, is never ending, though the pressures change. Currently, almost an explosive condition exists. It was with awareness of this great need that the institute wrestled with the problems relating to recruitment, selection and training.

The purposes.--It was not the nature of the institute to have a formal list of hypotheses, but one which sought to come to conclusions through discussion and lecture processes. Though some of the objectives, would probably have hypotheses inherent in them, the sessions were not designed to prove or disprove any statements.

More specifically the objectives of the institute were:

1. To present current and emerging concepts related to recruitment, selection, and training of trade and industrial teachers.

2. To identify those procedures that result in an effective program of teacher recruitment.

3. To identify effective selection criteria for obtaining persons with extensive potentialities for trade and industrial teachers.

4. To develop a guide for selecting teachers.

5. To develop guidelines for the effective preparation of teachers.

6. To increase the ability of state and local directors, supervisors and teacher educators to make use of guides for recruitment, selection, and preparing trade and industrial teachers.

The general plan.--The objectives of the institute, to a large degree, indicated the type of person who might profitably be a participant because only through actual intelligent participation could there be even partial achievement of the objectives. Persons with little or no experience pertaining to the recruitment, selection and/or training of teachers of trade and industrial education teachers would have contributed little; in fact, they would have been deterants to progress in discussion sessions.

The two-week institute was divided into three parts, each part being provided for the three-phase nature of the institute subject (recruitment, selection, training). Three days was spent on recruitment; three days on selection and four days on training and evaluation of the institute. The three subtopics were attacked by having consultants give formal presentations on various aspects of the subjects followed by small group discussions relative to the formal presentations. Discussion guides were provided for the groups. The consultants also acted as resource persons as they circulated from group to group.

Field trips were part of the activities engaged in by the participants. One excursion was made to the Kentucky State Department of Education where directors in the Bureau of Vocational Education discussed current and practical problems relating to the institute topics. Another field trip was made to Eastern Kentucky State University (24 miles from institute location) where they were given information and saw facilities for a pre-service trade and industrial teacher education program. This is a new program instituted by the universities in Kentucky for the purpose of trying to meet the expanding need for teachers of trade and industrial education.

Location of the institute.--The institute was held June 17, to June 28, 1968, in the Agriculture Science Building on the campus of the University of Kentucky, Lexington, Kentucky. The new facility provided meeting rooms for the total group as well as meeting spaces for sub-groups. Living accomodations were very adequately cared for in one of the new high-rise dormitories located approximately one-half mile from the meeting rooms. Although transportation was provided to and from the sessions, most of the participants chose to enjoy the short walk under the warm sunny skies which the Bluegrass State affords.

Fifty-four participants from twenty-eight states attended the institute. The geographical spread of the participants was widespread ranging from Maine to Hawaii and from Minnesota to Texas. Twelve consultants effectively challenged the group prior to the various group discussions.

Probably the full and true accomplishment of an institute may never be quantatively known. Participants gain much information and many ideas that they unconsciously incorporate into their own philosophy and at subsequent times act upon their refined thinking; it may be that this should be the ultimate for all educational meetings.

It is felt that a greater appreciation of the scope of the problem of attaining teachers of trade and industrial education was obtained by all the participants. They readily exchanged information, each one accepting certain ideas and some, no doubt, rejecting the same ideas. While it is good that persons with much experience be participants at an institute, certain dangers may exist in that such individuals may be reluctant to accept new ideas--old patterns of behavior tend to persist. The greatest protection against this danger is the awareness of its possibility.

Degree of accomplishment of the various stated objectives are stated in Results later in this report.

METHODS AND PROCEDURES

Criteria used in selection of participants and methods used for their invitation to attend the institute.--The proposal for the institute provided for a total of seventy participants to be divided in the following manner:

a. State supervisors of trade and industrial education--15
b. Local supervisors of trade and industrial education--30
c. Teacher educators of trade and industrial education--25

It was conceived that these types of personnel would be those most concerned with the topics with which the institute would be concerned, and that each group would bring valuable information and expertise unique to its functions.

Announcements concerning the institute were mailed to all state directors of vocational education with a request for names and addresses of persons in their states who would like to be considered as participants. Application forms were then mailed to these individuals.

Brochures describing the institute were also distributed at national meetings which were being held during the spring of 1968.

A total of seventy persons indicated an interest in attending the institute. However, for various reasons, as the beginning time for the institute approached, some of these interested persons were not able to attend. The actual number of participants was thus reduced to fifty-four. This group was divided in the following way.

a. State supervisors of trade and industrial education--12
b. Local supervisors of trade and industrial education--28
c. Teacher educators of trade and industrial education--14

Although the total number was less than that for which the institute was designed, the proper balance of types of persons was maintained so that original thinking as to "mix" was not negated.

Selection of participants.--It was the responsibility of the Director and the Co-Director of the institute to make final selection of participants. The institute was designed for persons who had responsibilities in recruiting, selecting and training teachers of trade and industrial education. Because of the speciality of the type of person toward which the discussion of the institute would be directed, it was necessary to respectfully deny participation to a few applicants who were not associated with the subjects of the institute or with trade and industrial education.

Procedures used in conducting the institute.--As previously stated the institute was divided into three parts, each part being directed toward each of the three aspects of the overall topic. The general

procedure used throughout the institute was one in which consultants made formal presentations followed by small group discussions as well as by total group discussion. Each small group had a leader who acted as a catalyst in bringing about total involvement of all members of the group, and a recorder who made notes of pertinent discussion. The rich background of experience possessed by all the participants produced meaningful discussion and each individual became an active participant. Consultants acted as revolving resource persons.

Group leaders met after the group sessions and pooled the most important points made by their groups. These gleanings were then turned over to the Co-Director of the institute for recording.

Additional information and food for thought was provided by two field trips, after which the participants discussed what they had seen (and had been told).

Essence of formal presentations.--Consultants made formal presentations relating to each of the three topics with which the institute was concerned. The essence of presentations directed toward recruitment of teachers of trade and industrial is as follows:

Mr. Jack Nix, State Superintendent of Schools, Atlanta Georgia (a keynote type of presentation)--Mr. Nix pointed out that schools are a part and parcel of society and that they are now trying to become all things to all people. Because of this tendency, the resulting total education program for all children for all people is indeed a heavy burden. Social problems do not stem from total failure but from an aspect of partial success, and the importance of society's on-going cannot tolerate either total failure or partial success in vocational education.

The Advisory Council on Vocational Education reports that the trade and industrial education program has had one of the most persistant growth rates. In 1960, fewer than one million students were enrolled; today, almost one-and-a-half million are enrolled. The number of trade and industrial teachers increased by ten thousand during the decade 1956-66. Mr. Nix brought out the question.--In face of expansion and great needs, how can we maintain a productive and diversified trade and industrial program in vocational education that will answer the needs of tomorrow's craftsman and tomorrow's industry?

Because of the effectiveness of programs being to a large degree dependent upon the quality of the instructional staff, it is imperative that we maintain an efficient program of recruiting, selecting and training of trade and industrial teachers.

Mr. Nix further stated that we must recognize that the trade and industrial teacher is different from most other teachers in education--most of them begin teaching before, or simultaneously with, their professional education. This can be a frightening experience. Qualities and requirements for licensure varies considerably from state to state which tends to aggravate the problem.

The trade and industrial teacher should exert the feeling that being competent craftsmen is the most magnificent thing that could happen to his students. This really means that the teacher must spend a longer time training and developing certain qualities for his teaching job than do most other teachers. In order to obtain and develop persons who can best do this teaching job there must be a much broader and more extensive cooperation between industry and education. In addition, there must be pre-service and in-service training programs for both full-time and part-time teachers.

Recruitment and selection should begin earlier than is the custom in many states. Guidance programs in secondary and post secondary schools should fully explain the benefits of trade and industrial education to impressionable youngsters. Students in vocational schools, high schools, and undergraduates in college are virtually untapped sources from trade and industrial teachers. Mr. Nix continued that there should be some process of giving one or two years college credit to top area vocational school graduates in order to nurture them into the trade and industrial program.

Another source of teachers would be from the list of former vocational school graduates who have been employed in industry for three or four years.

The process of revolving from industry to education, back to industry, and back to the ranks of education suggests a possible solution to the problems of recruiting, selecting, and training of trade and industrial personnel.

Dr. Daniel S. Arnold, Director, Kentucky Research Co-ordinating Unit (Presently Chairman, Educational Research and Development, College of Education, University of Kentucky).--Dr. Arnold presented a rather dismal picture regarding his review of research as it related to the recruitment, selection and training of teachers of trade and industrial education. He stated that though the quantity as well as quality was sparse this was no indication that the need did not exist. The literature contains many "idea" articles but they do little to solve problems. The articles appear to be "recapitulations of perennial arguments and expressions of privately held prejudices that acquire a large measure of holiness by their publication in the "journals."

Dr. Arnold continued by stating that several glaring deficiencies in the research literature relating to recruitment and selection of trade and industrial teachers are:

1. Areas of testing in the quality of trade experience that a craftsman has had.

2. Testing of potential trade and industrial teachers with respect to characteristics which relate to being a "sufficient teacher."

3. Long range studies on the relative value of various segments of professional personnel in determing who should and who should not be tried in a particular field of teaching.

4. The use of part-time assignment of the potential teacher while he continues to practice his trade.

5. Selection procedures for estimating the likelihood that an individual will continue to make personal efforts to update himself in the practice of the trade area in which he is teaching.

In recruiting we are considering the process of finding experienced tradesmen who can be convinced to leave industry and enter teaching. Thus, the questions to be answered are: (1) What are the characteristics of an individual who is most likely to make this move? (2) What are the concerns that he has about education and teaching that cause him to hesitate before making the change?

The typical trade and industrial teacher is 30-35 years of age with a trade experience of approximately 10 years and not completely satisfied with what he has been doing. Most of his dissatisfaction has resulted as a lack of opportunity for advancement. Many of these persons want the opportunity to be of broader service to society and to young people in particular. The greatest motivation for entering teaching is that it will provide the individual with a greater sense of accomplishment and with greater challenge. He views the association with young people and the possibility of affecting their lives as personally satisfying.

Dr. Arnold further stated that the tradesman who has made the decision to become a trade and industrial teacher it is most likely that the impetus came from one of three sources: (1) he has served in some capacity in an apprenticeship program; (2) he has been contacted more than once by a teacher friend or by a former teacher of his own who encouraged him over a period of time to go into teaching; (3) he became interested in teaching through upgrade training which he took in a vocational school, college or within his industry. The consideration time seems in all studies to be prolonged for a period of from a few months to several years.

Predominant factors that discourage the tradesman from entering teaching are:

1. Financial concerns--pay cut, loss of seniority and loss of company and union benefits.

2. Apprehension over his ability to do college level work.

3. A doubt on the part of the skilled tradesman that he can work with youth in a formal classroom setting.

4. A vague feeling of inadequacy on the part of the tradesman regarding his ability to relate to the individuals in the education profession who have achieved a greater level of educational attainment than himself.

In the selection of teachers, Dr. Arnold stated that on two points there seemed to be considerable uniformity among schools; (1) the personal

interview (2) written references. The single most valuable indicator of likelihood of success in teaching is some prior experience and demonstrated success in apprenticeship training programs.

Three specific types of testing instruments and/or methodologies are pointed out as being needed for a more adequate job of teacher selection. They are: (1) selection instruments to indicate levels of technical knowledge of a vocation (2) skill tests to measure the persons ability to perform tasks required of the occupation (3) tests for measuring the tradesman's ability to communicate ideas and information to others.

A final point made by Dr. Arnold was that other areas of vocational education have little, if any, more first rate research related to the problems of teacher selection than trade and industry and that which is done in other areas has little transfer value to trade and industry. The unique problems of trade and industry undoubtedly will require unique research to achieve adequate solutions.

Dr. Gordon McMahon, Director, Division of Vocational Technical Education, State University College, Oswego, New York.--Dr. McMahon pointed up the fact that recruitment for teachers of the less common courses will become more of a problem because of increased efforts to meet the training needs of a wider population, and that there is legislative sanction to offer an almost endless variety of courses to prepare youth and adults for gainful employment. Such courses may lie exclusively in one field or they may cut across the vocational service lines.

This endless array of possible offerings will make it necessary that we not only retool our laboratories and shops but our thinking as well. Dr. McMahon continued with the idea that certain dangers may threaten the success of less common courses. These dangers are those relating to choice of course, availability of cooperative work stations, certification and teacher recruitment. Our handling of these problem areas will determine the success or failure of these programs.

As we become more deeply involved in the development of new courses, we shall be compelled to make in-depth studies of employment needs; we must survey the actual employment situation and make course selection at the grass roots level.

Courses mentioned by Dr. McMahon as possibly falling in the category of "less common" courses were: building maintenance, agriculture mechanics, laundry service, veterinary aide, restaurant management, automatic heating service, automatic vending machines installation and service, small engine repair, child care, and service station attendent. Many of these courses cut across service lines and it would not be difficult to see implications for teacher selection and certification.

A three-pronged approach for securing teachers of less common courses suggested as follows: (1) Applicants with only a high school education should have five years experience at the journeyman level and be able to pass a competency test in the field they wish to teach. (2) Applicants with an associate degree should have two to three years of work experience

and be able to pass a competency examination. (3) Applicants holding a degree, if trained in the occupation they wish to teach, need have only one year of experience in the field and would be excused from taking the competency examination.

Mr. R. C. Bodenhamer, Associate State Director of Vocational Education, Atlanta, Georgia.--Mr. Bodenhamer spoke on the topic "Vocational Education Looks at Recruiting" and initiated his remarks by stating that the recruiting of good teachers for trade and industrial education is one of the most critical problems facing administrators of vocational education programs today.

The first ingredient in a successful recruiting program is a decent salary. Close and steady liason with business and industry leaders will help sell them as taxpayers on the necessity of paying high salaries and will help influence legislatures, boards of education, and others who control funds.

A second requirement of a good recruiting program is for the recruiter to move in "circles" in which potential teachers move. This means that he must know, on a first-name basis, plant managers, personnel officers, supervisors, foremen and others who operate in industry. Recruitment cannot be done in an office by making phone calls and writing letters. There is no substitute for personal friendship with these persons.

A valuable source of full-time teachers is from instructors who are presently teaching on a part-time basis. This individual would be a person who has already been tried as a teacher and who already is aware of the assets and liabilities of the teaching job.

State divisions of vocational education could do much in recruiting teachers by having a person on the staff responsible for the job. This person would know every vacancy and anticipated vacancy in the State. He would be in constant touch with both industry and local directors of vocational education.

Mr. Joe L. Reed, Professor and Head, Department of Industrial Education, The University of Tennessee.--Professor Reed presented a treatise on the "Use of Trade Competency Examinations in Recruiting, Selecting and Preparing Teachers of Trade and Industrial Education." He stated that a number of states have endeavored to introduce competency examinations into the certification process. These are mostly tests of paper and pencil variety with a few using actual performance in simulated job situations. There is little evidence to indicate that the test questions were "pretested" or the instruments validated according to accepted test procedures.

Competency examinations may be used in the following ways: (1) to provide state certification boards with an alternative to the "years of experience" requirement; this would provide useful information that state boards might be willing to consider; or may stimulate research to determine the amount of industrial experience required for certification; (2) to gain university credit for work experience or experience gained in cooperative programs; (3) to help raise salaries and prestige of vocational education, maintain high standards and to help teachers recognize important

facets of the trade to emphasize in teaching; (4) to validate vocational teachers' competencies in the eyes of academic administration; (5) for teacher certification purposes, as evidence of competency, for reciprocity purposes between centers and states; (6) as a means of teacher selection; (7) to identify sub-marginal and non-competent teachers who have been approved for teaching subjects in areas outside their areas of preparation and experience.

Professor Reed stated that on the basis of past experience, it is recommended that three types of examinations should be given to determine a person's occupational competency. These are: (1) a written examination (minimum of three hours) to determine technical information (it should include science, mathematics, technology, blue print reading and job planning in the occupation); (2) a manipulative examination (maximum of six hours). (It should consist of performance of trade or occupational operations on the job. This examination should be administered with actual machines, tools, materials, that the individual would be working within the trade or occupation.); (3) an oral examination (two hours). (This examination should consist of an evaluation of trade or occupational knowledge including personal qualifications.)

The amount of college credit to be given by the particular university is dependent upon the wishes of the school. Each type of examination should be treated separately in the giving of credit.

The examinations should be administered by a committee of from four to six persons--two from the craft or occupation, one or two from the State Department of Education and one or two from the college or university granting credit.

The following colleges and universities have agreed to consider tests for awarding credit: The three U.S. Service Academies, the universities of Florida, Illinois, Iowa, Michigan, Minnesota, Missouri, Rochester, Tennessee, Virginia, Washington as well as Boston College, Boston University, Cornell, DePaul, Fordham, Hunter, Michigan State, New York University, Roosevelt, Rutgers, San Diego State, State University of New York and Yale.

Dr C. Nelson Grote, Dean, School of Applied Sciences and Technology, Morehead State University, Morehead, Kentucky.--Dr. Grote directed his remarks toward "Desirable Traits for Trade Teachers." He defined a trait as "any aspect of personality that is reasonably characteristic and distinctive." We characterize persons by means of the traits they seem to possess. The problem of deciding which traits are useful and which are not is a difficult one.

Psychologists generally agree that traits are unrelated or independent of each other. However, their accumulative effect is what makes the "great teacher." One teacher may have a trait that is more pronounced or further developed or more influential in his teaching process and it is possible for a strong trait to offset a weaker trait. Each trait may have a different value as well as magnitude and it is this combined effect that creates differences in teaching effectiveness. There is still much research to be done before we will really know what combinations and the magnitude of traits that make for effective teaching.

Dr. Grote identified nine basic traits for a successful teacher--committed, professional, compassionate, systematic, gregarious, articulate, flexible, zealous, and religious. A more detailed discussion of these traits reveals the following:

A successful teacher must be committed:

to democracy as our basic form of government.
to education as a major force in shaping and reconstructing our society.
to vocational education as an important phase of the education process
to teaching as a first choice of jobs.
to his trade--the subject of his primary interest.
to his school or institution.
to his immediate superior and/or colleagues.
to his students.

A successful teacher must be professional:

by joining professional organizations and actively participating.
by developing or by continuing to develop professional and technical competencies.
by assuming new forms of professional and social behavior.
by living by a set of professional ethics--a code of standards.

A successful teacher must be compassionate:

by comprehending the dignity and worth of the individual.
by understanding that people differ significantly.
by his interest in guiding and directing learning experiences.
by being sensitive to his responsibilities as a professional educator.
by being patient.

A successful teacher must be systematic:

as demonstrated by an ability to organize himself to accomplish a given task.
as demonstrated by his ability to organize learning experiences in a logical and systematic fashion leading to effective and efficient learning.
as demonstrated by his ability to maintain his classroom and/or laboratory in a business-like manner.

A successful teacher must be gregarious:

as he likes people--especially the age group he plans to teach.
as he is outgoing.
as he is easy to get to know.
as he is a salesman.
as he demonstrates self-confidence.

A successful teacher must be articulate:

in order to use the language properly.
in order to be understood.
in order to select appropriate examples and illustrations.
in order to communicate complex ideas readily.

A successful teacher must be flexible:

for he is conscious of a changing environment.
for he is sensitive to the impact of technology upon education.
for he is adaptable to changes in content within his subject.
for he is receptive to changes in methodology.
for he is willing to accept another's point of view.
for he is himself teachable.

A successful teacher must be zealous:

for enthusiasm is contagious in the learning process.
for he is devoted to his task.
for he is eager to serve as a member of an educational team.
for he has the desire to make a contribution to his community and to his fellowman.

A successful teacher must be religious:

as evidenced by his church membership.
as evidenced by his stability.
as evidenced by the security of his personal convictions.
as evidenced by his own actions.
as evidenced by his faith in God.

Dr. Grote concluded by stating that it is recognized that no mortal man is perfect, and that one should not expect to find prospective faculty that possesses all the above qualifications described. However, one hopes to find teachers who possess many such qualifications and who have the potential to develop other qualities. Personality traits are independent of each other and as such there is little way for an exceptionally strong trait to make up for a void or weakness in another category. A teacher who does not possess the nine traits described above at some minimum level of magnitude is a "poor risk" as a professional teacher.

Orman R. Wright, Jr., Department of Personnel, Commonwealth of Kentucky.--Mr. Wright discussed the topic--"Written Tests in Selecting Teachers." He stated that the bedrock on which civil service selection programs are based is through job analysis. In short, the better the job analysis, usually the better the test. The crux of the problem in teacher selection is: what is a teacher and what distinguishes the good ones from the mediocre ones, and the mediocre ones from the poor ones? There is very little agreement on what constitutes a good teacher--any assertion about a quality required of teachers may be denied with some ease.

A problem equally as important as defining the job is the problem of establishing validity criteria against which the test's worth could be

proven. Any currently existing empirical validity criteria for teacher selection examinations would be highly suspect.

Mr. Wright elaborated on his experience in testing candidates for positions of teachers of trade and industrial education in Kentucky. He stated that the intent in test design was to develop a general intelligence test of the spiral-omnibus type pegged at the difficulty level of a bright high school graduate. Five different types of items are used in the examination: vocabulary questions where the candidate merely defines words with synonyms, questions involving the ability to reason with numbers, questions involving counting blocks (which of course, would involve the ability to perceive depth on a plane surface) and questions involving the ability to discern certain regular and predictable physical relationships. There are two types of these latter questions. In the first type, the question consists of two groups of figures. The four figures in the first group form a series showing some kind of progressive change in "nonsense" patterns. The task for the candidate is to select from the second group the figure that would continue this progression.

In the job analyses and meetings with the education department and university faculty people that preceded the construction of the test, it was agreed that most of the candidate competitors would, in a sense, be pre-selected in that they would be or would have been interviewed by Vocational School Directors or their representatives and a determination made as to their trade competence. In other words, when a vocational instructor candidate is referred to the department of personnel to compete for a position as a vocational teacher (welder), we are justified in making the assumption that the man is a thoroughly competent welder, familiar with all techniques of the trade and all of the tools and materials used by welders. The one thing we need to know: Does he have the intelligence (trainability, cognition, alertness, call it what you will) necessary to become a teacher? It was agreed a long time ago that knowledge of subject alone in itself is not a guarantee of teaching competence.

Therefore, selection philosophy is based on the idea that the intelligent journeyman may not be a natural born teacher, but we can make him a teacher; the unintelligent journeyman is far less likely to ever make the grade. In other words, we are seeking to establish that the candidates meet a minimal intellectual standard. If they do this we are, in effect, predicting they can become trade teachers. Intelligence is a global capacity, just as is teaching ability.

Our best definitions of intelligence are usually descriptive. An intelligent person has the ability to work quickly and accurately with numbers, the ability to visualize the appearance of an object assembled from a number of separate parts, is verbal and articulate, has the ability to devise ingenious procedures, the ability to read with understanding, to reason logically and to use good judgment in interpreting material, the ability to organize, schedule, and foresee problems that may arise.

Mr. Wright stated that much more work and research should be done in the testing area, and that he felt strongly that at least part of the

assessment of teaching ability and at least part of the predictive criteria for teachers should be based on some objective measure.

Dr. Robert Reese, The Ohio State University.--Dr. Reese gave a critical review of present practices in trade and industrial teacher education. He stated that vocational education is experiencing a metamorphisis that will develop into a physical structure with the capability of attacking and solving many substandard conditons that presently exist. The spotlight finds vocational education in a role that might be described as a panaces for many, if not all, social inequalities within our country.

One of our challenges confronting us and the condition for which we should be mustering our forces is the improvement of teacher education.

Since the vocational teacher who enters teaching has several years of occupational experience, teacher education must gear itself to training mature adults. Allen states that trade and technical teacher educators do not have the opportunity to work with individuals who are young enough to be truly malleable; rather they encounter them when their thought patterns have become fairly well established. Therefore, the teacher education programs developed for trade and technical teachers must anneal the thinking of these individuals, making them receptive to change, while building on their past experiences and, at the same time, devising a teacher education program that will coincide with the needs of the beginning teachers.

Dr. Reese gave the following highlights of research he had done relative to teacher education:

Whitney (1934) surveyed 25 states in an attempt to determine prevailing practices of teacher education. The respondents in his study reported practices, opinions and experiences under the following headings: (1) summer classes, (2) short intensive conference, (3) teacher training in institutions within commuting area, (4) itinerant teacher training, (5) correspondence courses from institutions and state department, (6) training through local supervision, and (7) training by means of conference leadership programs.

The conclusions he reached from the expressions made by the respondents are as follows: (1) there is no one best way to train (up-grade) teachers, (2) the local supervisor is one of the most important individuals in continued growth of the local teaching staff, (3) training also involves a return to industry periodically, and (4) as vocational education becomes more important, there will be a demand for objective measure of success.

Fagan (1967) reported to a trade and industrial teacher education and research seminar at the Ohio State University that the methods of teacher education employed in the states and territories as found by Walsh (1958) were a combination of two or more procedures emerging from five basic methods. These methods are: (1) contracted by state office with a college or university (27); (2) formal residence classes on college or university campus (25); (3) extension classes by college or university staff (33); (4) teacher educator on state staff (college credit not granted) (12);

and (5) extension classes during school year and residence classes during the summer.

Ramp (1962) reported a program of teacher education approved by the Illinois State Board for Vocational Education. The program requires that a prospective teacher graduate from an approved two-year post-high school program, followed by transfer to the university's industrial training courses for university graduation. An additional requirement of the program is that the student must work 24 months at full-time employment in the occupation for which he qualified by his vocational-technical institute training. The industrial internship of the prospective vocational teacher is supervised by the trade and industrial coordinator.

In the "Summary Report of Vocational-Technical Program Development by States" (1965), it was indicated that the states are concerned about the development of programs of in-service teacher preparation, summer workshops, and the need for more teachers to staff post secondary programs.

McDowell (1966) revealed a program of preparation of vocational trade and industrial teachers in Kentucky. He indicated an associate degree program for persons who have achieved a degree of occupational competence in the occupation which they propose to teach. He also described a baccalaureate degree program for the person who has no occupational competency.

Reed (1966) reported a joint effort of the University of Tennessee, Oak Ridge Associated Universities and the Union Carbide Corporation for the purpose of increasing the number of thoroughly prepared vocational-technical teachers.

Allen and Barlow (1966) reported a six-week program at U.C.L.A. for selected teacher educators from southern colleges. The program included observation of the U.C.L.A. team approach to teacher education, a series of field trips, guest lectures, and workshop seminars. The instructional part of the program utilized the small group concept in conjunction with multi-media instructional techniques.

Allen (1966) reported that from continued follow-up studies conducted by teacher education in California there was a weakness in the sequencing and coordination of the subject matter presented. As a result of attempting to improve teacher educators, California developed two core programs at U.C.L.A. The first year core concentrated on developing teaching skills, instructional environment control and professional habits and attitudes. The second core placed emphasis on developing trade and industrial education leadership. Students were made aware of the history, philosophy, the environment in which vocational education operates, and at the same time they learned ways of developing trade and industrial education curriculum. The team teaching approach was employed as well as having the students interact in small groups.

An analysis of the results from the new program of teacher education in California are as follows: (1) contents and sequence of the program leads to specific goals which can be identified by the students; (2) the

methods of presentation relates information much better than separate individual classes; and (3) the use of the team teachers permits an integration of instruction and assignments so that undue pressures from homework and course activities are not brought to bear on the students.

Dr. John O'Brian (1967) of Rutgers University has developed a master teacher training curriculum for teachers of occupational level training programs. A seven member committee developed the curriculum and courses of study for a 33-hour graduate program for teachers of students with special needs. The major instructional areas are (1) orientation workshop; (2) social psychology of the disadvantaged seminar in urban society, field experience; (3) seminar in learning, development and measurement, educational processes for teaching the disadvantaged, and practicum for teaching disadvantaged youth; and (4) professional issues seminar, integration option, masters project or evaluation paper.

Fagan (1968) reported an innovative approach to staffing and in-service problems here in Kentucky. New teachers were placed on the payroll effective June 1. With formal teacher education beginning on June 5th, they began a full summer schedule by taking the beginning teacher education courses, and principles of trade and industrial teaching. The middle of June the recruits reported to their respective schools which were still in session. Each new teacher spent two weeks in a student teaching situation with frequent visitations by teacher educators. At the conclusion of their student teaching experience the new teachers returned to the university and joined regular teachers who were enrolled in a continuation of in-service education. All new teachers were given a course in occupational analysis during the first two weeks of July, followed by a course in organization of teaching materials during the last half of July. The beginning August the new teachers returned to their respective schools for its opening. Many new teachers assigned to extension centers spent the latter half of August getting classrooms and laboratories ready for the arrival of the students.

The three basic concerns of teacher education throughout the nation are: (1) the tremendous need for more skilled craftsmen in our vocational schools, (2) the practices of teacher educators in developing the skilled and technical workers into professional teachers, and (3) the innovations or new ideas and developments in vocational education that are emerging across the country. It appears that all three are equally important and integrally related.

Dr. Calvin Cotrell, The Center for Vocational-Technical Education, The Ohio State University.--Dr. Cotrell discussed "The Differences in the Training Needs of High School and Post High School Trade and Industrial Teachers."

In considering the needs of these two populations he stated that a review of learning must be made at the high school, post-high school, and adult levels. A cursory review of the literature on learning provided little evidence to support differences in learning ability among these groups. Maturity of the learner as well as his motivation and purposes for being in school represent some differences between high school and adult students but these factors have little to do with one's ability to learn.

In order to approach the topic more succinctly, Dr. Cotrell gave some findings of a study in which he was engaged which was designed to develop, implement and test model curricula in vocational and technical teacher education.

Teacher activities were divided into eight categories--(1) instruction, (2) guidance, (3) management, (4) public relations, (5) general school activities (6) professional role, (7) student vocational organization and (8) coordination. In analyzing these activities a task force group revealed that differences in needs of high school and post high school teachers existed in guidance, general school activities, student vocational organization, and coordination. According to the task force ratings there appears to be no difference in the need categories of instruction, management and professional roles for the teachers of these two levels of students.

Dr. James R. D. Eddy, Retired, University of Texas.--Dr. Eddy centered his remarks on "Meeting the Teacher Preparation Needs of Teachers of Short Term Courses." He initiated his presentation with the statement that pressures were being developed today to make vocational industrial education solely concerned with secondary or post-secondary preparatory programs. If this occurs, we will be swallowed by the academicians and disappear as a vital professional force within the total educational program.

The four groups of teachers which are of concern for teacher preparation are: (1) regular preparatory teaching classes in the evening, (2) full-time itinerant instructors (3) regular part-time extension teachers, and (4) occasional teachers of part-time evening classes who only occasionally teach a course. The regular part-time extension teacher seems to be the group which is neglected. They receive little or no teacher preparation. Problems which are encountered in providing this preparation are: (1) lack of their time to study a single course , and (2) they are often widely scattered which prevents their grouping for teacher education purposes.

Some of the possible ways for overcoming these difficulties, though they have certain objections, are: (1) offer teacher training one hour before or one hour after the class which the person teaches; (2) offer teacher preparation courses on Friday evenings and Saturdays; (3) provide correspondance instruction and supervised discussion; (4) provide an extension teacher's handbook when nothing else is available.

Areas which appear to be the greatest need for the part-time teacher are: (1) methods of group instruction, (2) course organization and the development and use of instructional materials, (3) classroom management, records, reports, and physical arrangements, (4) Use of instructional aids, and (5) aims and objectives of vocational education.

Except in large centers, teacher preparation will need to be done by itinerant teacher trainers.

Rewards must accompany teacher preparation efforts by the part-time teacher. Some of these would be (1) pay while attending teacher training

classes, (2) higher rates of pay for teachers completing courses, and (3) certificate recognition with appropriate community publicity.

Miss Carol Van Tassel, Kentucky Research Coordinating Unit, University of Kentucky.--Miss Van Tassel made a presentation on "Guidelines for Professionals Working with Persons with Special Needs." which was a summary of a seminar focused on persons with special needs. She stated that certain guidelines were important when vocational educators concern themselves with persons with special needs. They are (1) professional personnel must be more concerned with people and less concerned with program; (2) vocational education has far more to offer persons with special needs than has any other aspect of education; (3) teachers of persons with special needs should be a "special kind of people."--individuals who are not bound by traditions; teacher preparation for these persons should consist of more courses in social sciences, special education, and even field work involving persons with special needs; and (4) persons with special needs migrate less than individuals who have achieved higher levels of education.

Guidelines which have pertinent relevance for vocational educators with respect to characteristics of persons with special needs are: (1) youth with special needs consider themselves adults by the time they reach their teens; (2) they are oriented to the present as opposed to the future--to getting rather than getting ahead; (3) they lack stimuli that develop verbal, cognitive and perceptual skills; (4) they reveal an emphasis on the pragmatic and materialistic; concrete objects and situations are highly valued; (5) they value education--they do not value school; (6) most disadvantaged youth desire to improve their situation; (7) the disadvantaged student learns through a concrete approach; (8) the parents of disadvantaged youth are often poor models; (9) maintaining status within the peer group is often one of the most motivating factors of the disadvantaged; (10) they feel alienated from society and view life as a situation where there are no alternatives; (11) they are often very creative--especially when compared to middle class youth; (12) the mother is the most meaningful figure in the disadvantaged family; (13) the people of depressed rural areas emphasize kinship relationships; (14) the social institutions of depressed rural areas reflect and tend to perpetuate the existing situation; (15) they lack knowledge of employment opportunities; (16) they are generally characterized by physiological problems.

Essential to the realization of successful programs for persons with special needs are quality teachers. Some of the characteristics and qualities of these teachers are as follows: (1) they must have a deep commitment to and respect for these people; (2) they must have a thorough knowledge of the environment in which these people live, the values they hold and their perceptions of society as a whole; (3) they must realize that existing testing instruments are not culture free and generally provide inaccurate assessments of the ability of these people; (4) they must be competent in the subject matter of their fields; (5) they must have the ability to modify existing course outlines and units to meet the situation, (6) they must not stereotype these students as low achievers. (7) they must realize that an important part of their work is to modify behavior; (8) they must promote extra curricular activities; (9) they must have the ability to detect special problems and make proper referral;

(10) they must provide an environment that makes it easy and interesting to learn, (11) they must not interpret a student's feelings of inferiority and subordination as unmotivated behavior.

Mrs. Christine Wallace, Coordinator--Persons With Special Needs, Bureau of Vocational Education, Frankfort, Kentucky--Mrs. Wallace centered her remarks on "Implications for Vocational Teachers of Persons With Special Needs." She stated that, generally, the learning processes for these persons are subject to the same principles as are the learning process for the normal population of learners but with a difference. Mrs. Wallace continued by pointing out the weakness of persons with special needs as well as some strengths of these people.

She listed the following characteristics of successful programs for persons with special needs: (1) more emphasis is placed on learning than on teaching; (2) pupil centered programs planned to really meet individual needs, interests and abilities; (3) meaningful assessment of students; (4) continuous evaluation; (5) small pupil-teacher ratio; (6) a key teacher with: (a) empathy for the students, (b) interest and enthusiasm for working with them, (c) thorough knowledge and versatility in subject matter; (7) flexibility in methods of teaching techniques involving pupil participation; (8) adapted to short attention span; (9) thorough teaching; (10) rich supply of appropriate instructional materials; (11) masterful use of the demonstration method; (12) coordination of total school effort; (13) joint effort with other agencies; (14) community understanding and support; (15) cooperation of industry.

Dr. Durwin M. Hanson, North Carolina State University -- Dr. Hanson discussed "Relationships Between Programs of Teacher Preparation and Requirements for Certification." He stated that when planning and conducting the teacher-training activities of the state, the following factors should be taken into consideration: (1) the training should be conducted under the supervision of the State Board (in order to receive benefits of the appropriations in the arts); (2) such training should be given only to persons who have adequate vocational experience in the line of work for which they are preparing themselves or who are acquiring such experience; (3) professional training should be provided for persons who have entered upon or are preparing to enter upon the responsibilities of: (a) teachers and coordinators of trade and industrial subjects, (b) supervisors and teacher trainers of local and state trade and industrial education programs, (c) administrators of local and state school systems who need information on and an understanding of the purposes and methods of trade and industrial education, and (d) conference leaders and job instructors for industrial plants or other organizations employing persons engaged in trade and industrial pursuits."

The specific details regarding qualifications are formulated in terms of teacher certification standards and guidelines and generally administered through the State Department of Public Instruction or designated representative. The formulation of certification requirements varies greatly from one state to another and as a result there is no uniform pattern among states.

Teacher certification plans greatly influence programs of teacher education. The over-riding issue as we look at a few examples of teacher training is the question: What are the teacher certification roadblocks in my State?

Traditionally, in trade and industrial education, the pattern has been to offer in-service training to the trade or technical teacher who has entered the vocational education teaching profession. Until recently, few of us have had any sizable enrollment in pre-employment teacher-training programs. Perhaps among the early attempts to encourage individuals from labor to enter the trade and industrial education teaching profession was for colleges and universities to recognize and adopt policies whereby college credit could be granted for trade and/or work experience. A recent study regarding the granting of college credit for work experience was completed by Mr. Donald Lauda. Lauda in 1964 reported that of 41 institutions, responding to an inquiry on the subject of college credit for work experience, 27 institutions indicated that they had programs with provisions to grant credit for work experience. The amount of credit (total semester or quarter hours) granted, techniques for evaluation, and policies regarding residence requirements, tuition charges (fees), enrollment, and other certifying factors varied among the 41 institutions. In a further study by Lauda it was reported that of 201 institutions offering programs in industrial education a total of 49 colleges or universities recognized the granted college credit for trade or industrial experience.

In addition to the college credit programs for trade experience, a number of colleges or universities initiated programs whereby occupational experience has been provided through a cooperative training program. Again, the approach to certifying teachers under a college or university cooperative work experience teacher training program varies in the procedures for admitting students, means of evaluating work experience, scheduling of on-the-job activity and class work, amount of credit awarded for work experience and other factors. W. A. Ramp reported on the cooperative trade and teacher training approach and the role of the two-year technical institute in preparing teachers for trade and industrial education. Eastern Kentucky University announced an associate degree program in Vocational Industrial and Technical Education. The two-year curriculum combines trade experience with general education and technical education. It is stated in the EKU brochure that, "the primary purpose of this program is to prepare persons, with a minimum of three years of approved trade experience, to teach trade and/or technical subjects." Rutgers University recently announced a cooperative occupational pre-teaching experience program which will include 5000 hours of on-the-job experience.

A principal change that has improved the quality of college instruction has been the modification of course offerings to make them more practical and applicable to a specific vocational field. Vocational teacher educators and supervisors have worked with subject-matter departments of the teacher education institution to revise certain technical courses for the purpose of having them better meet the needs of those preparing to be vocational teachers. Field, laboratory, and on-the-job experiences likewise have made possible worthwhile activities with a major vocational emphasis. Colleges and universities have been very cooperative in these and other modifications of programs. However, there is still a need to continue to improve the

technical and professional preparation of teachers of vocational subjects, not only for those who are preparing to teach but also for those who are already employed as teachers.

Additional presentations were by Mr. Earl Bowler and Mr. Lane Ash of the United States Office of Education; Mr. Dwight Spayth of Square Electric Company; Mr. Richard Bell from International Business Machines; Dr. J. B. Kincheloe of the University of Kentucky; Mr. Leonard Hocker of Texas Instruments; Dr. Charles Gibson of the State Department of Education, Frankfort, Kentucky; and Dr. Albert Levy of the University of Kentucky. However, manuscripts for these presentations were not available.

Evaluation of the institute.-- The institute was evaluated by two procedures: (a) an instrument which each participant completed at the end of the institute which attempted to indicate the immediate effect of the institute proceedings on the participant; and (b) an instrument forwarded to each participant during the month of April (1969), nine months after the institute, to determine what effect if any, the institute might have had on the participants as they proceeded with their responsibilities of recruiting, selecting and/or training teachers of trade and industrial education. These returned instruments were studied by an evaluation committee of six persons (three persons from Kentucky and three persons from States other than Kentucky) and their digest of the opinionairs indicated the effectiveness of the project.

RESULTS OF INSTITUTE

Results of the institute proceedings may better be summarized under questions which were discussed by the various subgroups. Those questions relating to recruitment were:

(1) What teacher competencies seem to be most necessary as one looks to the recruiting of teachers?

(2) Which of these competencies are most difficult to develop and therefore should receive consideration as pre-requisites in recruiting?

(3) What are some likely places to look for teachers who possess these competencies as one sets out on a recruiting program?

(4) Who should be responsible for recruiting at the local and state levels?

Questions relating to the selection process were:

(1) Who should be involved in the selection process?

(2) Who should make the selection?

Results of discussion focused on teacher training were related to the following topics:

(1) Standards of teacher education programs.

(2) Proposals for pre-employment teacher education.

(3) Proposals for in-service programs for teacher education.

(4) Proposals for evaluation of trade teacher programs.

Treatment of the above questions and topics resulted in the following:

I. Recruitment of trade teachers

A. What teacher competencies seem to be most necessary as one looks to the recruiting of teachers?

1. Occupational competency

a. Most difficult to develop
b. Must be available before one begins to teach
c. Not always commensurate with length of occupational experience
d. Should know the occupation generally <u>and</u> perhaps some facet of the occupation in depth
e. Competency must involve skill and knowledge plus a history of successful employment in the occupation to be taught

2. Personal competency

   a. An interest in and enthusiasm for teaching
   b. Potential for growth
   c. Personal attractiveness (appearance, manners, etc.)
   d. Adaptability
   e. Desire for personal improvement

3. Social competency

   a. Ability to inspire and motivate
   b. Ability to communicate
   c. Ability to relate to people
   d. Civic awareness
   e. Ability to develop socially
   f. Potential for leadership

4. Educational competency

   a. High school graduate or equivalent
   b. Broad base educational background
   c. Broad learning through past experiences
   d. Desire to improve oneself educationally and professionally
   e. Instructional experience/training

B. Which of these competencies are most difficult to develop and therefore should receive consideration as pre-requisites in recruiting?

1. Priority listing

   a. Occupational competence and technical information
      (1) Little opportunity to develop these once one has started teaching
      (2) These competencies are needed from the very first day of teaching
      (3) Without this competence, one has nothing to teach
      (4) Skilled occupations require relatively long training periods

   b. Personal and Social competencies

      (1) A serious lack in these competencies can generally be detected before hiring and will tend to eliminate from consideration
      (2) Teaching situation enables one to build on an otherwise acceptable base of personal and social competencies

   c. Educational competency

      (1) Ample opportunity for in-service training above minimum acceptable high school level

(2) Adequacy of teacher education services (quality and quantity) indicates the relative importance of education as a factor conditioning the recruitment of trade teachers
(3) Desire of the recruit to improve himself conditions initial level of education to be required

Conservative teacher salaries are not apt to attract persons who possess all of these competencies to a major degree. We must accept responsibility for providing in-service training and experiences that will enhance one's ability to perform the many tasks of teaching.

There appeared to be little support for a requirement of a college degree (including the associate in arts degree) as a pre-requisite to an initial teaching certificate. It was generally agreed that this could be a worthy long-term goal that teachers should be encouraged to move in this direction through in-service training, but that a degree should not be given priority over or a substitute for occupational experience.

C. What are some likely places to look for teachers who possess these competencies as one sets out on a recruiting program.

1. Direct advertising

   a. Local newspaper
   b. Trade journals
   c. Professional journals
   d. Pamphlets and brochures
   e. Radio and television

2. Contact with other agencies

   a. State departments

      1. Personnel division
      2. State supervisory training instructors
      3. Teacher certification personnel

   b. Colleges and Universities

      1. Teacher education departments
      2. Placement bureaus
      3. Junior college (especially evening programs)

   c. State employment service
   d. Military separation centers
   e. Industrial organizations

3. Contacts within the school operation

   a. Present teaching staff
   b. Local advisory committees

c. Follow up of school graduates
d. Other local or area school directors
e. Extension and adult programs
f. MDTA and other special program teachers
g. Itinerant trade teachers
h. Sales personnel
i. Former trade teachers
j. Industrial arts teachers who have trade experience

It was recognized that budget provisions must be made if the formal approach through public advertising media is used. Perhaps, the inexperience of the group with commercial recruiting accounted for greater effort and discussion being given to the informal approach. One conferee suggested that the most fruitful efforts are probably those made on a personal basis by members of the local school.

D. Who should be responsible for recruiting teachers at the local and at the state level?

The four groups reporting gave strong support for local autonomy in the recruiting of teachers. They also gave emphasis to the necessity for total involvement of the entire school staff (including advisory committees) in the task of recruiting, where the power to hire is vested outside the dominion of the chief officer of the vocational school unit, it was strongly recommended that the recommendation of the person in charge of the vocational unit should prevail in selection.

Experience of the groups indicated that commercially operated recruiting programs through news media or by a full time recruiter can be well planned, better funded, and give promise of greater returns if conducted on a state wide basis.

II. Selection of Trade Teachers

A. Who should be involved in the selection process?

Varying patterns of administration of trade and industrial facilities made a short answer inappropriate. Those who work under state boards and those who work under a regional or local board were reluctant to surrender autonomy, or any semblance of it to the other. There was universal agreement that all those who have or who share responsibility for an operation should have some part in selecting the person or persons who will staff that operation. It was generally concluded that the amount of involvement in selection should be commensurate with the extent of involvement in carrying out activity. The institute participants emphasized a need for horizontal involvement as well as something more than one-step vertical involvement. They also agreed that more people should be involved than those who control the financial backing of the position.

Of all the areas under consideration during the institute, it was in the area of trade teacher education that most of the participants felt qualified to state what ought to be. The discussion groups attacked the problem from four different directions. These directions included standards for teacher education programs, proposals for pre-employment teacher education, proposals for in-service programs for teacher education, and proposals for evaluation of trade teacher programs.

The following were submitted as guide lines to be followed in the operation of trade teacher education programs:

1. Teacher educators who are students should meet fully the entrance requirements of the institution offering the courses and should qualify for a fully recognized degree.

2. The teacher education program at the institution should be recognized by all academic departments as an integral part of the overall university curriculum offerings.

3. Teacher educators should be qualified members of the institution faculty and should be ranked along with their peers.

4. There should be a reasonable amount of similarity and uniformity in course offerings and course content at all institutions which offer industrial teacher educational programs.

5. Course content should be current and appropriate to the needs of the industrial teacher.

6. Teacher education programs should provide for pre-service in-service, and itinerant courses on a credit basis and appropriate to certification requirements.

7. Teacher education programs should provide for training in leadership development.

8. Full time teacher educators should be provided to work in the field and at the institution on a 12 month basis.

9. Provision should be made through competency examinations or other means by which an appropriate amount of college credit may be obtained for occupational experience.

Considerable interest was shown in proposals for pre-employment training for new industrial teachers. It appears that many of the states do not provide for such training, but all participants agreed that this should be provided.

John Conolly reported that Massachusetts requires satisfactory completion of one hundred twenty clock hours of teacher education course work over a period of four weeks before an intitial teaching

All were in agreement that the final recommendation must of necessity go from the chief school officer to the legally constituted body improved to contract with personnel, usually a state, regional, or local board of education.

The following were identified as persons or groups, some of whom might logically assist in the selection process:

Chief school officer	School principal
Selection committee	Director of personnel
Department head	School board
Local director	State or regional supervisor
Local supervisor	Teacher educator personnel

There was a general feeling expressed in a number of ways that all those who could bring information to bear on the selection, those who would have occasion to work with the person selected, and those who might make a contribution to the successful performance of the person selected might reasonably be included among those who would be involved in the selection process.

B. Who should make the selection?

One implication of the previous question is that the selection of a teacher is not the task of one person, but rather, is strongly affected by team effort. A differentiation should be made between making a selection and implementing the legal procedures by which one is officially employed. In most systems, a local, regional, or state board of education is the only body which can legally contract with an individual for teaching services since the board is the only body who can legally dispense funds.

There was general agreement that the chief school officer should bear full responsibility for selecting the teacher based upon the work of all who were involved in the process. This selection then becomes a recommendation to the board who in turn employs the teacher or asks for another recommendation from the chief school officer. It was emphasized throughout the discussions that the recommendation of the person who has responsibility for the vocational program should be the one that would prevail.

In situations where there is more than one applicant, an Applicant Rating of Interview Impressions may aid in making comparisons that lead to a decision. (see page) The assigning of numerical scores to each of the factors in proportion to the importance of the factor to the job opening in question may qualify the applicants qualifications and ease the task of making a decision.

III. The Training of Trade Teachers

certificate can be issued. Subsequent to this and during the first year of teaching, an additional one hundred and forty hours of instruction are given in professional subjects. During the second year of teaching, teachers are required to complete another one hundred and forty clock hours in related instruction and practice teaching.

Dr. L. C. McDowell, reporting for Kentucky, reviewed the plan then in use in that State. New teachers who plan to begin teaching in August or September of a given year are employed in or before June 1, of that year. The initial experience is a course in the Principles of Trade Teaching which is taken during the first two weeks in June, (2 semester hours). Then two weeks are spent working and teaching at the parent area school under the direction of a master trade teacher. The entire month of July is spent on the University campus in pursuit of four semester hours in Occupational Analysis and Teaching Materials for Trade Education. New teachers are then sent back to the parent area school to participate in the re-opening of school (11 month basis) and to apply their new knowledge and skill in preparing their own shop (usually at an extension or "satelite" school) for opening about September 1.

These new teachers have experienced the opening and closing of a school year, have had some teaching experience with real students under careful supervision, and have had an opportunity to plan and prepare a course of study and a shop organization.

Itinerant teacher training service is available every year to every trade teacher in the Commonwealth and consulting service is constantly available on call.

Both plans held promise of developing the skills and knowledge that institute participants said all teachers should possess before they attempt to teach.

The group gave oral expression to the concept that all teacher education should carry university credit with it.

Enthusiasm was expressed for in-service programs of teacher education. One group expressed an opinion that teachers gain more from in-service than from pre-service training. In-service classes were credited with aiding in the retention of teachers, especially when extension credit can be used to raise one's position on the salary schedule. Such classes were also credited with improvement of self image, keeping teachers up-to-date, and encouraging teachers to complete a degree.

Massachusetts plan was reported which involved semi-annual in-service conferences, credit courses which enable one to earn a degree in a ten year period and annual visitation and evaluation by the State staff.

Utah also holds a week long conference each summer in addition to a week of orientation of new teachers. Within the initial ten-year period, a teacher must have completed twenty-four quarter hours in professional teacher education course work and at least twenty-one hours of electives for a required minimum of forty-five quarter hours.

Evaluation of a constant or periodic nature is one way of assisting programs to continue to meet minimum standards and to progress above these minimums. Institute participants submitted the following list of procedures which might constitute an effective process of evaluation of industrial teacher education programs.

1. See that all requirements of the State Plan which are related to teacher education are met.

2. Establish adequate curriculum content for on-campus and off-campus classes.

3. Determine the caliber of the staff.

4. Evaluate adequacy of physical facilities.

5. Examine level of coordination that exists among all agencies involved in teacher education.

6. Determine the cost efficiency.

7. Review scheduling in terms of appropriate balance of teaching, research, and service.

8. Evaluate contributions of staff to publications.

9. Determine service contribution of leaders.

10. Examine the extent and quality of use of advisory committees.

11. Examine accreditation status of institution.

12. Determine opportunities available for technical content instruction.

13. Examine the effectiveness of public relations program of the institution.

EVALUATION OF THE INSTITUTE

The institute was evaluated by two ways: (1) an evaluation immediately after the closing of the institute and (2) an evaluation nine months after the closing of the institute. It was desirable to know what the reactions were of the participants regarding acceptance of presentations, of consultants housing and meeting room facilities, new ideas which they attained, and probably most of all, whether they believed the institute had achieved its objectives.

The evaluation, made nine months after the institute ended, was an attempt to discover what effect (if any) the institute had on the participants as to their recruiting, selecting and/or training of teachers of trade and industrial education.

The following tables shows the results of the first evaluation (made immediately after the closing of the institute). A total of 46 persons completed the questionnaire.

As can be expected, the range of views in an evaluation by any group will be wide. Some will find that certain activities in which they will have engaged will have met their needs in total while others will take a dim view of the same experience. While this fact is revealed in some of the following tables the large majority of the participants evaluated their experiences in a positive manner.

Table 1 shows the degree to which each sub-group (state directors or supervisors, teacher educators, and local administrators) viewed the attainment of each of the objectives. It will be noticed that the number of responses were not consistant for some of the sub-groups. This was the result of some of the participants not responding to certain items. The more or less equal division of responses in the two positive categories ("attained to an Excellent Degree" and "Attained in Part") would indicate the objectives had been achieved. Additionally, it will be noticed the sub-groups were to a great extent equally divided between the two positive categories. It is significant to note only one of forty-six responses indicated that Objective 1 was attained to a very limited degree; two of forty-five responses indicated Objective 2 had been attained to this same degree; and two of forty-six responses indicated Objective 4 was achieved to a very limited degree. Objectives 3, 5 and 6 received no responses in the "Attained to a very limited Degree" category.

The participants' reactions to the amount of time allotted to each of the types of activities in which they were engaged during the institute are indicated in Table 2.

TABLE 1

ATTAINMENT OF OBJECTIVES OF THE INSTITUTE AS VIEWED BY THE PARTICIPANTS

Objectives	Attained to an Excellent Degree			Attained in Part			Attained to a very limited degree		
	State Supervisors	Teacher Educators	Local Administrator	State Supervisor	Teacher Educators	Local Administrator	State Supervisors	Teacher Educators	Local Administrator
1. To analyze secondary and post secondary trade and industrial education programs as a means of determining desirable qualities needed in teachers	3	5	13	5	5	13	1		1
2. To explore new sources of recruitment of trade and industrial teachers	2	5	13	7	5	11			2
3. To develop guidelines for recruiting trade and industrial teacher candidates	4	4	13	5	6	14			
4. To explore the techniques used in selecting trade and industrial teachers	5	5	13	4	5	12			2
5. To develop effective guidelines for selecting trade and industrial teachers	1	6	11	6	3	16	2	1	
6. To examine various plans presently being used to prepare and upgrade teachers of trade and industrial education	3	3	12	5	7	15	2		

TABLE 2

PARTICIPANT REACTION TO AMOUNT OF TIME ALLOTTED TO INSTITUTE ACTIVITIES

Activity	TIME ALLOTTED		
	Amount of time Allotted was About Right	More Time Needed	Less Time Needed
1. Speakers or Consultants	37	1	7
2. Question and Answer Sessions	19	25	2
3. Small Group Sessions	5	37	3
4. Large Group Sessions	32	10	5
5. Panels	25	17	1
6. Trips	41	3	1

Contributions which consultants made to the success of the institute were evaluated by the participants in the following way:

TABLE 3

PARTICIPANT EVALUATION OF CONSULTANTS

Estimated Value	Frequency
Great Value	25
Some Value	17
Little Value	0
No Value	0

Five participants thought there should have been more consultants and that each one should have had less time; twenty-seven of the participants believed the number of consultants to be about right, while fourteen participants thought there should have been more time given to fewer consultants.

As to the structure for discussion and arrangements for leaders and recorders, the participants gave the following evaluation:

TABLE 4

PARTICIPANT EVALUATION FOR STRUCTURE OF DISCUSSION

Degree of Efficiency	Frequency
Excellent	12
Good	21
Sufficient	10
Poor	1
Inadequate	1

It was a great concern to the Director and Co-Director of the Institute that they have the participant's thoughts regarding contributions made toward solutions of problems related to recruitment, slection and training of teachers of trade and industrial education. Table 5 shows how the participants reacted toward this subject.

TABLE 5

PARTICIPANT REACTION TOWARD PROBLEM SOLVING CHARACTERISTICS OF THE INSTITUTE

Degree of Effectiveness	Frequency
I am adequately equipped to solve problems	3
I will make wiser decisions concerning my problems	39
I was helped in some ways in solving my problems	4
The institute missed the point for me and my problems	0

The participants appeared to be pleased with arrangements which had been made for their housing, meals and entertainment during the two weeks which they were on the University of Kentucky campus. Their evaluation of this part of the institute is indicated in Table 6.

TABLE 6

EVALUATION OF HOUSING, MEALS AND ENTERTAINMENT

ACTIVITY	Excellent	Good	Fair	Poor
Housing	32	10	2	1
Meals	17	21	7	1
Breaks	27	14	3	0
Entertainment	31	10	4	1

Participants listed many key ideas which they gained from attending the institute. These ideas were listed under the three activities with which the meeting was concerned - recruiting, selection, and training. The ideas were:

A. Recruitment

1. Appoint one man to do most recruiting
2. Use industry more
3. Procedure for recruiting teachers by follow-up of alumni
4. Involve key personnel and follow a planned program
5. Set up persons or programs on state and local levels to handle recruitment
6. Copy some practices of industry
7. Methods: advertising, word-of-mouth, employment service
8. Trade competency examinations
9. Small pamphlet presenting information about teaching in vocational education
10. Make it an organized effort
11. Maintain a continuing effort
12. Develop a plan to recruit for the state as a whole
13. Have a plan to interest industrial workers in teaching
14. Organize teachers and urge them to recruit teachers for future programs
15. Increase promotion at the state level
16. Increase clearing house activity at the state level
17. Advertise
18. Contact military posts or bases
19. Have more contact with industry and organizations
20. Work closer with present T&I teachers concerning recruitment
21. Organize short term teaching situations to evaluate potential full time instructors
22. Develop understanding between the public and school

23. Involve advisory committees in recruiting teachers
24. Sell the advantages of living and working in the area rather than stressing school
25. Better use of advertising media

B. Selection

1. Use opinions of present instructors
2. More careful study of applicants' work experience and background
3. Closer check on personality traits
4. Be more concerned with techniques of interviewing
5. Make use of selection committees
6. Have a testing program
7. Encourage use of better selection criteria
8. Use an impression sheet
9. Have applicants submit brief job description of each job held and have employers react to these
10. Evaluate each candidate at regular intervals
11. Don't base decisions on personal feelings
12. Use broader scope in evaluating
13. Evaluate positive and negative findings
14. Use a strength and weakness comparison sheet
15. Set up standard before starting to select
16. Consider competency and dedication
17. Pay more attention to resumes
18. More involvement on part of supervisors
19. Use a planned sequential procedure
20. Involve more people in interviewing
21. Use competency examination
22. Recommend best applicants to director
23. Continue to use department heads and instructors for recommendations

C. Training

1. Develop cooperative arrangement with industry and other resources
2. Make needed curricular revision
3. Have more itinerant teachers
4. Recognize value of pre-service and in-service training
5. Establish standards in training
6. Explore new approaches like Kentucky and Michigan
7. Reaffirm basic fundamental approaches
8. Develop universal training common to all teacher evaluators within an area
9. Cooperate with other states in teacher education programs
10. Provide credit for trade competency
11. Structure course or program offerings sequentially
12. Have seminars on a regular basis
13. Have more pre-employment training sessions
14. Have more in-service training
15. See that instructors get more training in field or area
16. Essential to use State universities
17. Encourage the employment of additional teacher trainers
18. The desire to better train beginning teachers
19. Recommend a training program for adult evening teachers

20. Teacher exchange program
21. Place instructors on payroll for receiving teacher education previous to employment
22. Constant upgrading in teaching practices and trade proficiency

Early in April, 1969, a questionnaire was mailed to 47 full-time participants of the Institute. The purpose of the questionnaire was to determine what changes had taken place in recruiting, selecting, and training of trade and industrial teachers in the area served by program participants. The instrument also attempted to assist in determining the extent to which such changes may be directly attributed to the Institute. Forty-seven questionnaires were returned. A summary may be found in the appendix.

Six Institute participants returned to the University of Kentucky campus on April 25, 1969 to review the evaluations that were returned and to make an assessment of the value of the Institute in the light of intervening activities of all those who responded. (Questions 8 and 9 were reproduced in error and therefore were not counted in the evaluation).

The evaluation revealed that nearly all Institute participants have been involved in recruiting, selecting and training teachers. They have had an opportunity to share the benefits of the Institute with others. While educators are not known for their proclivity for rapid changes, it appears that many changes have taken place in the areas of recruiting, selecting and training of trade teachers. Perhaps the most pronounced changes have been in training.

There is strong evidence that the rate of growth of the "growing edge" of trade education has been hastened considerably. Many of the participants testified to a new awareness of their individual capabilities to improve performance in recruiting and selecting new teachers. Participants reported an increase in the number of applicants and greater satisfaction in the selection process.

While all states represented were at different levels in training programs, most of them reported advances in the level of teacher training service or indicated progress in the inclination of their state to move into new areas. The following advances were typical:

1. Initiation of pre-service programs for new teachers
2. Initiation of 2 year and 4 year degree programs.
3. Initiation of or expansion of in-service programs, both campus and itinerant.
4. Acceptance of programs to assign academic credit for trade skill and knowledge based on proficiency examination.
5. Acceptance of programs to assign academic credit for industry service schools.

There is considerable evidence to indicate that the Institute gave reinforcement to many notions already held by the participants before coming to the Institute. This reinforcement has led to an action program on the part of many who are now aggressively working in their area to bring about changes, and hopefully improvement, in the realm of recruiting, selecting and training teachers of trade and industrial education.

Appendix A

UNIVERSITY OF KENTUCKY
Lexington, Kentucky 40506

College of Education
Vocational Education

April 18, 1968

We are please to announce that the University of Kentucky will hold a two-week National Institute on Recruiting, Selecting, and Training of Teachers in Trade and Industrial Education, June 17 - 28, 1968. The purpose of the institute is to develop guidelines for use in improving procedures in staffing a rapidly expanding program of trade education.

The institute is seeking seventy participants from all the states including Puerto Rico and the Virgin Islands. The group will be limited to state and local administrators, and teacher educators of trade and industrial education. More specifically, the participants should have a direct concern and responsibility for recruiting, selecting, or training trade and industrial teachers.

We invite your personal application and ask that you serve as our ambassador to acquaint the qualified persons in your area with this opportunity. The enclosed folders provide additional information.

Sincerely yours,

L. C. McDowell
Director of the Institute

Bernard T. Fagan
Co-Director

Appendix A

UNIVERSITY OF KENTUCKY

LEXINGTON, KENTUCKY 40506

COLLEGE OF EDUCATION
VOCATIONAL EDUCATION

April 22, 1968

Dr. Carl Lamar, Assistant Superintendent
Bureau of Vocational Education
State Department of Education
Frankfort, Kentucky

Dear Dr. Lamar:

The enclosed brochures pertain to the "Institute of Recruitment, Selection, and Training of Teachers of Trade and Industrial Education" which will be held here at the University June 17-28, 1968. We are endeavoring to make this Institute of high quality and are especially desirous that Kentucky be represented by its full quota of seven participants who are most elegible to take full advantage of each day's meetings.

The proceedings of the Institute have been discussed with Mr. Fred Martin and a brochure has been mailed to him (as has been mailed to all other State Supervisors of Trade and Industrial Education).

I hope you will distribute the brochures to qualified applicants and, if you think appropriate, discuss with those in the Bureau whom you deem advisable, the most desirable candidates for Kentucky's allotment of seven participants.

You will note that an application is attached to each brochure. Persons who are accepted as participants from our State (and from other states) should avail themselves of the entire Institute--they should not submit an application if they cannot attend full time.

If I can be of any further service in answering questions about the Institute, please do not hesitate to let me hear from you.

Sincerely yours,

L. C. McDowell
Associate Professor
Trade and Industrial Education

LCM/mjw

Enclosures

Appendix A

NATIONAL INSTITUTE ON RECRUITMENT, SELECTION
AND TRAINING OF TEACHERS

Please complete the following and return at once.

(Check one)

_____ 1. I will attend the Institute, June 17 - 28.

_____ 2. I will not attend the Institute, June 17 - 28.
(If you are not attending, stop here and mail at once.)

(Check one)

_____ 1. I am planning to use University housing.
(Meals conveniently by and daily transportation will be furnished from housing site to conference site)

_____ 2. I will arrange for my own housing.

If you are driving your car, please give us the following information:

Make of car _____ Body Style _____
Year it was made _____ License _____ _____
state Number

If known at this time, please give us this information:

Mode of travel:

_____ Plane: (___Allegheny, ___Delta, ___Eastern, ____Piedmont)
_____ Car
_____ Bus
_____ Train: (___ C & O, ____ L & N, ____Southern)

Scheduled time of arrival _____ _____ _____ A.M. P.M.
day date time

Appendix B

ROSTER OF PARTICIPANTS

SS - State Staff
TE - Teacher Educator
LS - Local Supervisor

Allwardt, Lawrence E. (SS)
137 East Wilson Street
Madison, Wisconsin 53703

Anderson, J.D. (LS)
940 Forsyth Street
Macon, Georgia 31201

Armstrong, Dr. Leslie H. (TE)
1302 North Street
Olympia, Washington 98501

Aten, Kenneth L. (LS)
314 North Jeffers Street
North Platte, Nebraska 69101

Ballard, L.V. (SS)
Texas Education Agency
Austin, Texas 78711

Baskett, Jack (LS)
College Heights
P.O. Box 278
Bowling Green, Kentucky 42101

Cantor, Roger G. (TE)
Westby Hall
Glassboro State College
Glassboro, New Jersey 08028

Caudill, H.D. (LS)
3101 Bluebird Lane
Jeffersontown, Kentucky 40299

Cole, Marvin (LS)
1501 Frederica Street
Owensboro, Kentucky 42301

Connolly, John (TE)
182 Tremont Street
Boston, Massachusetts 02111

Cote, Theodore J. (TE)
College of Education
Temple University
Philadelphia, Pennsylvania

Crisp, Jeff Jr. (TE)
Western Kentucky University
Bowling Green, Kentucky 42101

Daniels, R. B. (SS)
State Board For Vocational Education
Room 1116
State Office Building
Topeka, Kansas 66612

Davey, Edward F. (SS)
Rhode Island Department of Education
Vocational Division
Hayes Street
Providence, Rhode Island

DeMoss, A.O. Jr. (LS)
P. O. Box 563
Madisonville, Kentucky 42431

DiGiovanni, Joseph A. (LS)
Vocational Building
Virginia Avenue
Weirton, West Virginia 26062

Duntley, Richard A. (LS)
Maine School Administrative
District Number 9
Farmington, Maine 04938

Frick, Jean E. (TE)
1000 W. Garden Avenue
Coeur d'Adlene, Idaho 83814

Hackney, B.M. (TE)
Engineering Extension Service
F.E. Drawer K
College Station, Texas 77843

Harrington, Robert P. (LS)
Box 1024
Hastings Nebraska 68901

Hemmann, Herbert A. (LS)
9820 Manchester Road
Rock Hill, Missouri 63119

Herklotz, Theodore R. (LS)
230 E. 9th Street
Cincinnati, Ohio 45202

Hobbs, W.W. (LS)
P. O. Box 399
Moultrie, Georgia 31768

Hock, Jerome A. (TE)
874 Dillingham Blvd.
Honolulu, Hawaii 96817

Holtorf, John T. (LS)
4500 Steilacoom Blvd. S.W.
Lakewood Center, Washington 98499

Howard, Wendell (LS)
15th Street - 11th Avenue
Granite Falls, Minnesota 56241

Hunnicutt, James C. (SS)
P. O. Box 2847
University, Alabama 35486

Jeter, James E. (LS)
842 N. Mockingbird
Box 981
Abilene, Texas 79604

Johnson, Connie W. (LS)
2130 Allais Road
Hazard, Kentucky 41701

Keim, Dr. Lawrence (TE)
Central Connecticut State College
New Britain, Connecticut 06050

Kisko, Joseph P. (TE)
Vocational-Technical Education
State Office Building
Montpelier, Vermont 05602

Kobeck, Edward J. (SS)
2111 Terrace Avenue
Knoxville, Tennessee 37916

Latham, Robert S. (TE)
4389 Satter Drive N.E.
Salem, Oregon 97303

Leverette, L. Lee (LS)
980 South Cobb Drive
Marietta, Georgia 30060

Lowe, Jacob H. (SS)
P. O. Box 507
Abingdon, Virginia 24210

Marston, C. R. (LS)
McDowell Street
Bristol, Tennessee 37620

Martin, Fred A. (SS)
Department of Education
Frankfort, Kentucky 40601

Mathiowetz, Loretta (SS)
Centennial Building
St. Paul, Minnesota 55105

Maynard, Howard R. (LS)
44001 Garfield
Mount Clemens, Michigan 48043

Nelson, Jay L. (LS)
4600 South Redwood Road
Salt Lake City, Utah 84107

Nutter, Paul W. (LS)
Spaulding High School
Ayers Street
Barre, Vermont 05641

O'Brien, Ralph D. (LS)
Ferris State College
Big Rapids, Michigan 49307

Palmer, Lee (SS)
139 S. Castillo Street
Santa Fe, New Mexico 87501

Patrick, Charles T. (LS)
"C" Central School
South Charleston, West Virginia 25303

Peterson, John L. (LS)
512 East Van Buren
Phoenix, Arizona 85004

Quimby, Arthur R. (LS)
122 Washington Street
Hartford, Connecticut 06106

Roper, Melvin J. (TE)
Cedar City, Utah 84720

Russ, George J. (SS)
New Jersey State Department of Education
225 West State Street
Trenton, New Jersey 08625

Schulte, Thomas D. (LS)
Ashland State Voc-Tech School
Ashland, Kentucky 41101

Scott, Don T. (TE)
170 Snyder Building
University of Toledo
Toledo, Ohio 43606

Squyres, James E. (TE)
Department of Industrial Education
Clemson University
Clemson, South Carolina

Urner, Lewis H. (LS)
Area Voc.-Tech. School
Waynesville, Missouri 65583

Westbrook, Dr. Carl O. (LS)
Northern New Mexico State School
El Rito, New Mexico 87530

Wold, Woodrow (SS)
Bozeman Public Schools
P. O. Box 520
Bozeman, Montana

Appendix C

A NATIONAL INSTITUTE ON THE
RECRUITMENT, SELECTION AND TRAINING OF TEACHERS OF
TRADE AND INDUSTRIAL EDUCATION

S C H E D U L E OF A C T I V I T I E S

All sessions will begin at 8:30 a.m. and will end at 4:00 p.m. with appropriate time alloted for lunch.

MONDAY, JUNE 17

A.M.

Registration (lobby of the Agriculture-Science Building)

Orientation to the institute

Announcements and introductions

Presentation: "The Importance of Effective Procedures in Trade and Industrial Teacher Recruitment, Selection, and Training"
---Mr. Jack Nix

P.M.

Presentation: "Review of Research in Recruitment, and Selection of Trade and Industrial Teachers"
---Mr. Dan Arnold

A.M. TUESDAY, JUNE 18

Presentation: "Competencies of Trade and Industrial Teachers"
---Mr. Earl Bowler

Group Discussion

P.M.

Presentation: "Recruiting Teachers for the Less Common Courses"
---Dr. Gordon McMahon

Group Discussion

Appendix C

WEDNESDAY, JUNE 19

A.M.

Presentation and Panel Discussion:
"Industry Looks at Recruiting"
---Mr. Richard Bell
"Recruiting for General Education"
---Dr. J. B. Kincheloe
"Vocational Education Looks at Recruiting"
---Mr. Ed Bodenhamer

Small Group Activity

P.M.

Group Development of Guidelines for Recruiting

THURSDAY, JUNE 20

A.M.

Group Discussion: "Current Efforts as a Device for Selecting Teachers"
---Dr. Joe Reed

P.M.

Presentation: "Desirable Traits for Trade Teachers"
---Dr. C. Nelson Grote

Presentation: "Written Tests as a Device for Selecting Teachers of Trade and Industrial Education"
---Mr. Orman Wright

FRIDAY, JUNE 21

A.M.

Presentation: "Interviewing as a Method of Selecting"
---Mr. Dwight Spayth

Group Activity in Role Playing

P.M.

Group Work

Coordinate Plans for Week-end

Appendix C

MONDAY, JUNE 24

A.M.

Presentation: "Selection Processes Used by Industry"
---Mr. C. Leonard Hocker

Small Group Work: "Developing Guidelines for Teacher Selection"

P.M.

Presentation: "The Role of a State Department of Education in Recruitment, Selection, and Training of Teachers"
---Dr. Charles Gibson
(This will take place in Frankfort, Kentucky)

TUESDAY, JUNE 25

A.M.

Presentation: "A Critical Review of Present Practices in Trade and Industrial Teacher Education"
---Dr. Robert Reese

Presentation: "Differences in Training Needs of Vocational Teachers of High School Students and Teachers of Post High School Students"
---Dr. Calvin Cotrell

P.M.

Presentation: "Trade and Industrial Teacher Training Program at Eastern State University"
---Dr. John Rowlett
(This session will be held in Richmond, Kentucky followed by dinner in Berea, Kentucky.)

WEDNESDAY, JUNE 26

A.M.

Presentation: "Meeting the Teacher Preparation Needs of Teachers of Short Term Courses"
---Dr. James Eddy

Report: "Pre-service Training Block for Beginning Teachers"
---Dr. L. C. McDowell

Report: "M.D.T.A. and O.E.O. Projects Teacher Training"
---Mr. Bernard T. Fagan

P.M.

Panel Presentation and Discussion:
"Training Teachers for Persons With Special Needs:
---Dr. Albert Levy, Miss Carol Vantassel,
and Mrs. Christine Wallace

Small Group Discussion

THURSDAY, JUNE 27

A.M.

Presentation: "Legislation Pertaining to Preparation of Vocational Education Teachers and Its Implications for Recruitment, Selection, and Training of Teachers of Trade and Industry"

---Mr. Lane Ash

Presentation: "Relationships Between Programs of Teacher Preparation and Requirements for Certification"

---Dr. Durwin Hansen

P.M.

Small Group Discussion

Evaluation of the Conference

FRIDAY, JUNE 28

A.M.

Small Group Work to Finish Group Reports

Total Group Session to Finalize Complete Report

Summary and Adjournment at 12 noon.

Appendix D

G R O U P G R I N D I N G S

Tuesday, June 18

1. What teacher competencies seem to be most necessary as one looks to the recruiting of teachers?

2. Which of these competencies are most difficult to develop and therefore should receive consideration as pre-requisites in recruiting?

3. List some likely places to look for teachers who possess these competencies as one sets out on a recruiting program.

4. Who should be responsible for recruiting teachers at the local and at the state level? (Identify persons by title and suggest the area of involvement of such persons.)

Appendix D

G R O U P G R I N D I N G S

Wednesday, June 19

1. Develop a list of the information that should be called for on an application blank for a trade teacher. (If you should have time, you may wish to design a suggested application blank.)

2. List the steps or develop a guide line to be followed in planning a recruiting program for a single school.

3. List the steps or develop a guide line to be followed in planning a recruiting program for a state system.

Appendix D

G R O U P G R I N D I N G S

Monday, June 24

Steps in Making Selection (What one does)	Guideline to be Followed
1.	1.

Who should be involved in the selection process?

Who should make the selection? tentative? final?

Appendix D

G R O U P G R I N D I N G S

Wednesday, June 26

1. In what ways may recruiting of teachers of persons with special needs differ from the pattern of recruiting which we developed on Wednesday of last week?

2. In what ways may selection of teachers of persons with special needs differ from the pattern of selection which we suggested on Monday of this week?

3. What minimum (1) training and (2) experience requirement would you establish for teachers of persons with special needs and for teachers of low-skill occupations.

4. What pre-service training should be provided for persons employed for this task? (Define in terms of teacher competencies needed)

5. What in-service program should be established for these teachers?

Appendix E

A NATIONAL INSTITUTE ON
RECRUITMENT, SELECTION AND TRAINING OF TEACHERS OF
TRADE AND INDUSTRIAL EDUCATION

Check title: ( ) State director or supervisor
( ) Teacher educator
( ) Local administrator

INDIVIDUAL EVALUATION

1. To what degree were the following institute objectives attained? Check the appropriate column.

	Attained to an excellent degree	Attained in part	Attained to a very limited degree
a. To analyze secondary and post secondary trade and industrial education programs as a means of determining desirable qualities needed in teachers.			
b. To explore new sources for recruitment of trade and industrial teachers.			
c. To develop guidelines for recruiting trade and industrial teacher candidates.			
d. To explore the techniques used in selecting trade and industrial teachers.			
e. To develop effective guidelines for selecting trade and industrial teachers.			
f. To examine various plans presently being used to prepare and upgrade teachers of trade and industrial edu.			

2. React to the time allotment for each of the following:

	Amount of time allotted was about right	More time needed	Less time needed
a. Speakers or consultants			
b. Question and answer sessions			
c. Small group sessions			
d. Large group sessions			
e. Panels			
f. Trips			

3. Many consultants were used during the seminar. Generally speaking, (realizing variations with each consultant), do you consider their contributions:

   a. _____ of great value

   b. _____ of some value

   c. _____ of little value

   d. _____ of no value

4. Would you recommend:

   a. _____ more consultants and give them less time

   b. _____ about the same number of consultants

   c. _____ fewer consultants and give them more time

5. Do you feel that the structure for discussions was:

   a. _____ excellent

   b. _____ good

   c. _____ sufficient

   d. _____ poor

   e. _____ inadequate

6. Do you feel that the information presented:

   a. _____ has adequately equipped you to solve problems

   b. _____ will help you make wiser decisions concerning the problems

   c. _____ helped in some ways

   d. _____ missed the point

   Elaborate:

7. List key ideas gained from the institute which you plan to implement when:

   a. Recruiting

b. Selecting

c. Training

8. Evaluate the following facilities:

	Excellent	Good	Fair	Poor
a. Housing				
Dormitory				
Off-campus				
b. Meals				
c. Breaks				
d. Entertainment List activities in which you have been engaged:				
e. Staff				

9. What did you like most about the institute?

10. What did you like least about the institute?

11. What changes would you recommend for a similar institute?
Examples: organization, length, emphasis, etc.

Appendix E

Information Survey for Evaluation of Institute for Recruitment Selection

1. Name _____ Position _____

   Address of Place of Employment _____

   _____

   _____

2. Indicate your responsibility for:

   (a) Recruitment of T&I teachers
   (b) Selection of T&I teachers
   (c) Training of T&I teachers

	Much	Moderate	Little	None

3. Indicate degree of success since July 1, 1968 for:

   (a) Recruitment of T&I teachers
   (b) Selection of T&I teachers
   (c) Training of T&I teachers

	Much	Moderate	Little	None

4. Indicate degree to which you have been able to share information with others who have responsibilities for:

   (a) Recruitment of T&I teachers
   (b) Selection of T&I teachers
   (c) Training of T&I teachers

	Much	Moderate	Little	None

5. Indicate degree of shortage of T&I teachers now existing in your immediate area.

	Great Shortage	Moderate Shortage	Little Shortage	No Shortage

6. Indicate degree of shortage of T&I teachers now existing in your state.

	Great Shortage	Moderate Shortage	Little Shortage	No Shortage

7. Has there been a greater shortage of T&I teachers in your immediate area during the past 12 months? Yes ____ No ____

8. To what extent did your participation in the institute (in Lexington), last year, result in increased responsibility in your present position? (check one)

Great Shortage	Moderate Shortage	Little Shortage	No Shortage

9. If your answer to the preceding question is positive, did this represent a change of position? Yes ____ No ____

10. Are you aware of any behavioral change regarding recruitment, selection, and/or training of teachers of trade and industrial education as a result of your attendance of the institute in Lexington (1968)? Yes ____ No ____

11. If your answer to the preceding question is yes, please indicate what you conceive this change to be.

_____

_____

_____

12. Has there been any change in minimum qualifications for teachers of trade and industrial education (post-high school or in school) in your state (or district) during the past year? Yes ____ No ____

13. If the answer to the preceding question is "yes," please indicate what the change has been. _____

_____

_____

_____

14. Have you engaged in any meetings during the past year (in your state) concerning the qualifications of teachers of trade and industrial education? Yes ____ No ____

15. What changes (if any) in the minimum qualifications of trade and industrial teachers (in your state) do you foresee during the next five years? _____

_____

_____

_____

16. Has there been any change in your own thinking or philosophy during the past year, regarding qualifications for trade and industrial teachers? Yes ____ No ____

17. If the answer to the preceding question is "yes," do you associate this change with your experiences at our institute last summer? Yes ____ No ____

18. Have recruitment efforts for trade and industrial teachers in your state been effective during the past year (check one) very effective ____, moderately effective ____, limited in effectiveness ____, not effective ____.

19. What sources of recruitment of T&I teachers are used in your state? Industry ____, Armed Forces ____, Colleges ____, New publications ____, Other sources ____, (write out other sources) _____.

20. Did you develop or cause to be developed during the past year, a new source of recruitment for trade and industrial teachers? Yes ____ No ____

21. Did you develop, or cause to be developed, during the past year, a plan or procedure for recruiting new teachers for trade and industrial education? Yes ____ No ____

22. If the answer to the preceding statement is "yes," did the new plan or the idea of a new plan relate to activities experienced in the institute last summer? Yes ____ No ____

23. Have there been any changes in techniques (emphasis) or procedure of selecting trade and industrial teachers in your state during the past year? Yes ____ No ____

    If the answer is "yes," what were these changes? _____
    _____
    _____
    _____

24. Do you feel that there has been an improvement in the selection of teachers in your state this past year? Yes ____ No ____

    If "yes," do you have any evidence to support your opinion?
    _____
    _____

25. Have there been any changes in the preparatory program for trade teachers in your state during the past year? Yes ____ No ____

    If "yes," what are these changes? _____
    _____
    _____

26. Have there been any changes in the in-service program for training trade teachers in your state during the past year? Yes ____ No ____

    If "yes," what were these changes? _____
    _____
    _____

27. What changes in the preparation of trade teachers do you foresee during the next five years in your state?

Pre-employment? _____
In-service? _____
Graduate? _____

28. What changes would you personally like to see brought about in the training of trade teachers in your state? _____
_____
_____
_____